UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,318	02/01/2002	Pietro Perona	06618/776001/CIT 3395	9800

			EXAMINER
20985	7590	12/14/2006	STREGE, JOHN B

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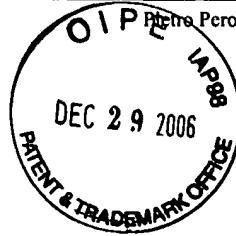
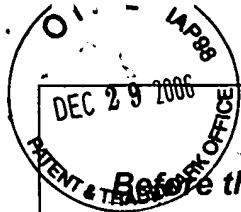| ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Advisory Action Before the Filing of an Appeal Brief	10/066,318	PERONA ET AL.
	Examiner	**Art Unit**	
	John B. Strege	2624	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED <u>22 November 2006</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

    a) ☒ The period for reply expires <u>3</u> months from the mailing date of the final rejection.

    b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

    Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

    (a)☐ They raise new issues that would require further consideration and/or search (see NOTE below);

    (b)☐ They raise the issue of new matter (see NOTE below);

    (c)☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

    (d)☐ They present additional claims without canceling a corresponding number of finally rejected claims.

        NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

    The status of the claim(s) is (or will be) as follows:

    Claim(s) allowed: _____.

    Claim(s) objected to: _____.

    Claim(s) rejected: <u>1,5-9,11,12,15-23,25,26 and 28</u>.

    Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet.</u>

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

JINGGE WU
PRIMARY EXAMINER

U.S. Patent and Trademark Office

PTOL-303 (Rev. 08-06)   **Advisory Action Before the Filing of an Appeal Brief**   Part of Paper No. 20061211

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments filed 11/22/06 have been fully considered but they are not persuasive.

Primarily the Examiner would like to point out that the Applicant refers to Basri as reciting in the background that it is "about constructing models of classes in individual objects" (emphasis added by the Examiner). The Examiner disagrees with this paraphrasing as it is misleading, rather Basri recites "constructing models of both classes and individual objects) (emphasis added by the Examiner).

The Applicant then goes on to argue that nowhere does Basri reference teach using any model with their teaching. The Examiner respectfully disagrees as the whole purpose of the unsupervised clustering of the images of the 3D objects is to automatically construct models (first paragraph of the introduction explicitly states, "we introduce below a system that begins with a large number of unlabeled images of 3D objects and attempts to cluster the images according to the shape of the objects. Clustering images is important if we wish to automatically construct models, of both classes and individual objects"). Thus Basri does teach using a model with their teaching.

Furthermore as the Basri reference concentrates on the unsupervised clustering of the sequence of images that are used in the model then these images are the training images. The Applicant further argues that Basri does not teach correspondence between homologous parts among the training images. As pointed out by the Examiner Basri teaches a similarity measure (thus finding homologous parts) that is based on measuring the distortion of local features.

The Applicant continues by arguing that Basri does not teach "ignoring other features that are not in the set of homologous parts" and states that Basri is concerned with the similarity of images, not the similarity of parts. The Examiner respectfully disagrees. As already discussed above and further seen in the first paragraph of section 5.1, the measure of similarity is based on measuring the distortion of salient local features (thus parts) between images. Thus since Basri teaches similarity between local parts, and further teaches that only similarities between pairs of images that resemble each other matter for the computation, this effectively teaches the limitation, "ignoring other features that are not in the set of homologous parts".

The applicant further argues that vector quantization is different than using eigenvectors, and that Basri does not teach vector quantization to reduce the total number of detected features. The Examiner respectfully disagrees. Eigenvectors are a vector quantization and in section 4.2 Basri teaches that the representation includes the dominant eigenvectors (second paragraph). This in turn is used in section 4.3 to carry out the clustering.

The Applicant uses the same arguments already addressed for claim 1 and goes on to say that claim 1 requires that similar features which are spatially offset are combined. However this is a definition of what clustering is and is clearly taught by Basri in the fourth paragraph of section 3.

Regarding claim 6, the Applicant argues that Burl does not teach using similar quantized features to form a model. However Examiner does not rely on Burl to teach this, rather Basri is used to teach this limitation.

The same argument is used for the rejection of claim 23 stating that Matthews does not teach anything about probabilistic assessment. Again, Basri is relied upon to teach this.

Thus as the arguments have been addressed the rejections as set forth in the previous final office action are maintained.